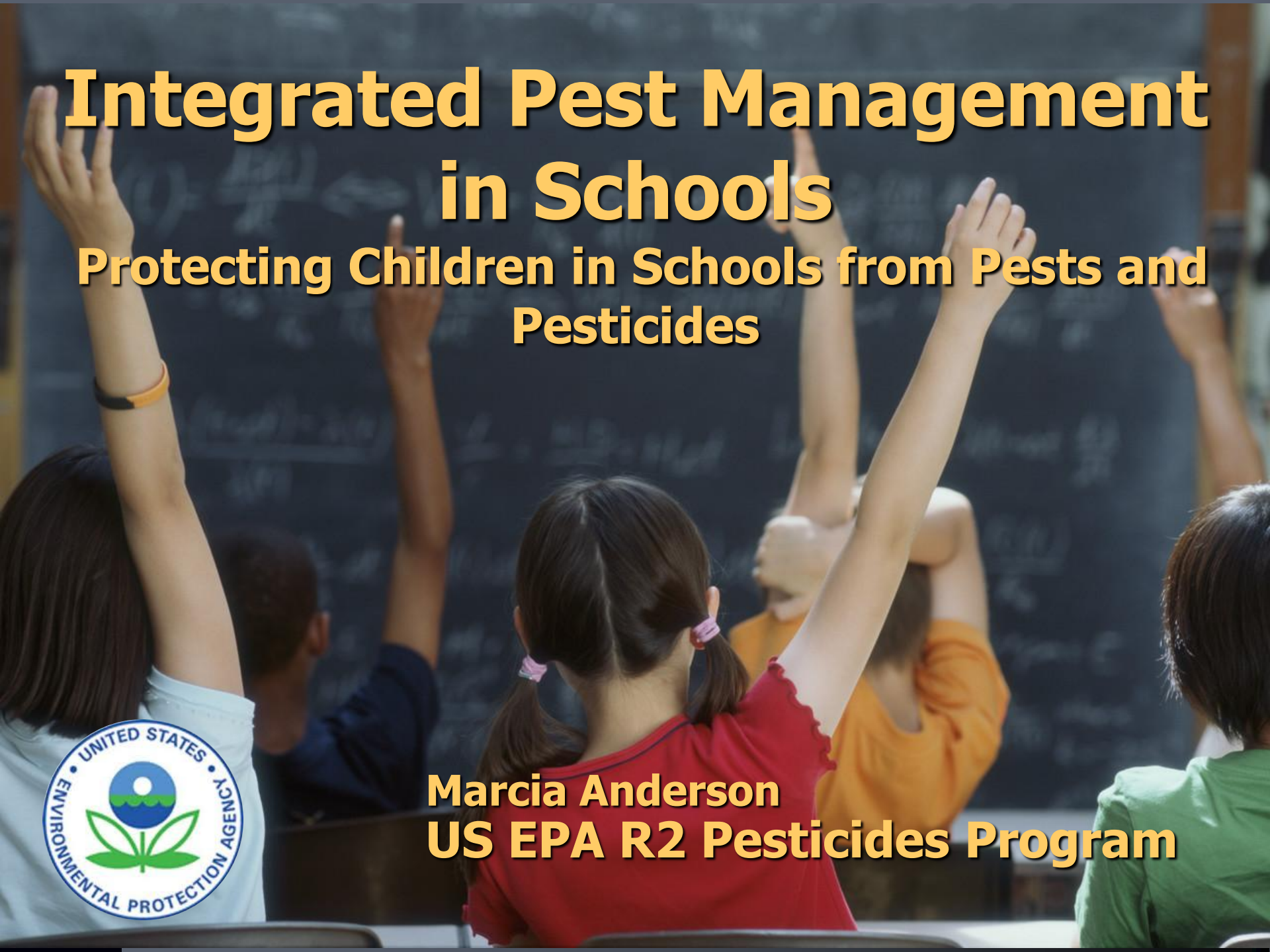
Integrated Pest Management in Schools

Protecting Children in Schools from Pests and Pesticides



Marcia Anderson
US EPA R2 Pesticides Program

What are Pesticides?

- Pesticides are powerful tools for controlling pests.
- Pesticides are substances used to prevent, destroy, repel or mitigate any pest.
- Many are inherently toxic and may have potential health risks, especially around children if misused.

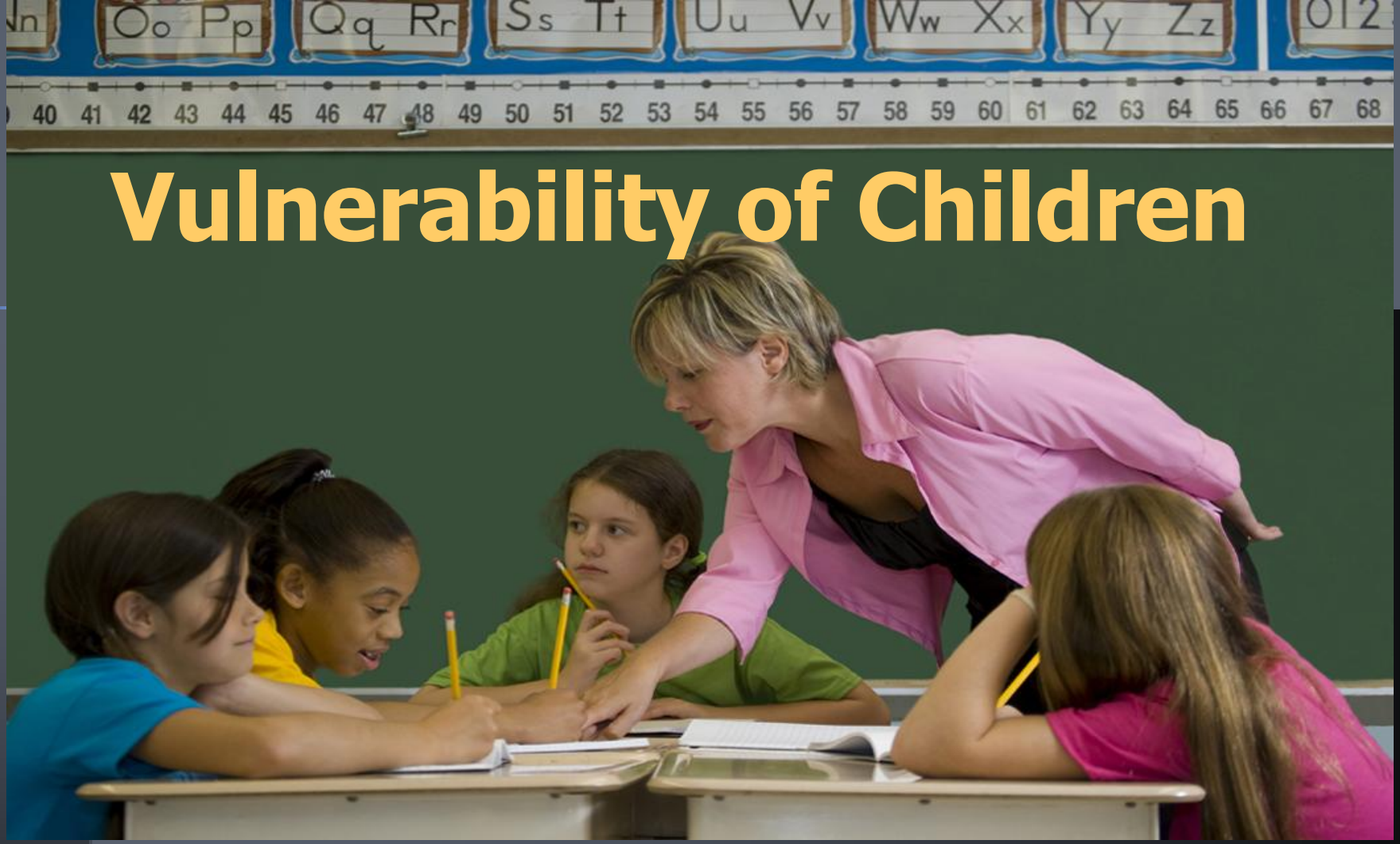
Pests and Pesticides in Schools

- It is important to keep schools free of pests that may cause infectious diseases and allergic reactions.
- Many schools hire pest control operators to apply pesticides on a routine basis to control pests.
- There is an increasing concern about the possible adverse health effects of misused or overapplied pesticides on children.

Children are not little Adults

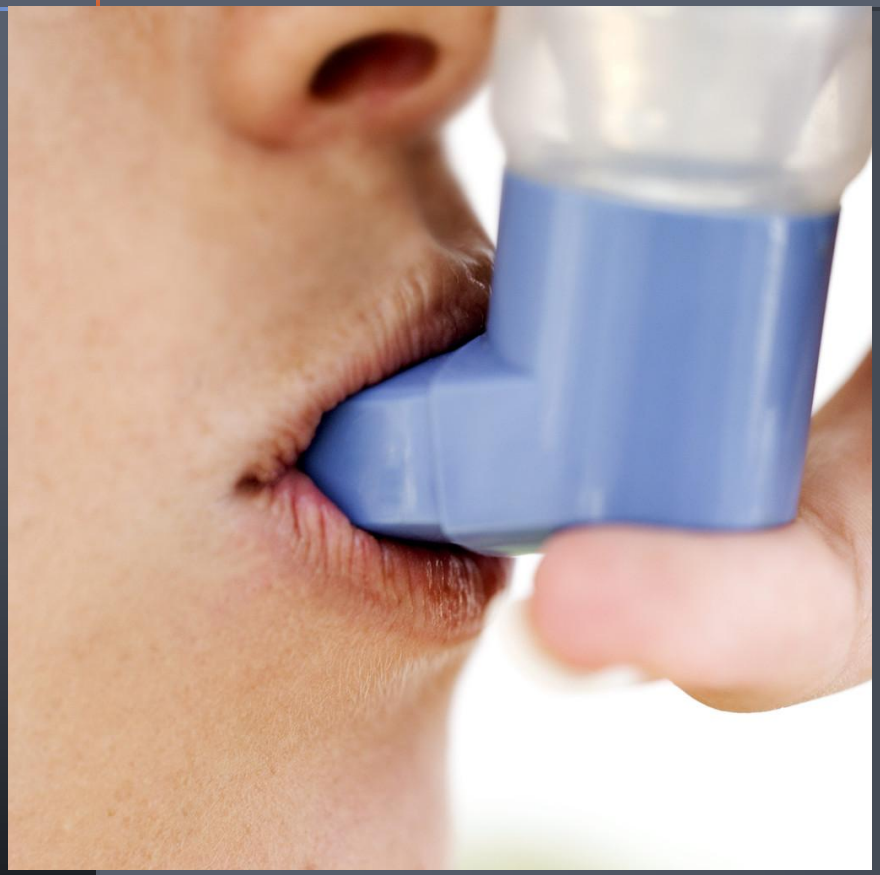
- Windows of vulnerability in Development
- Differences in Physiology
- Differences in Behaviors

Vulnerability of Children



Children are more susceptible to environmental exposures relative to adults because their bodies are still developing and ever-changing.

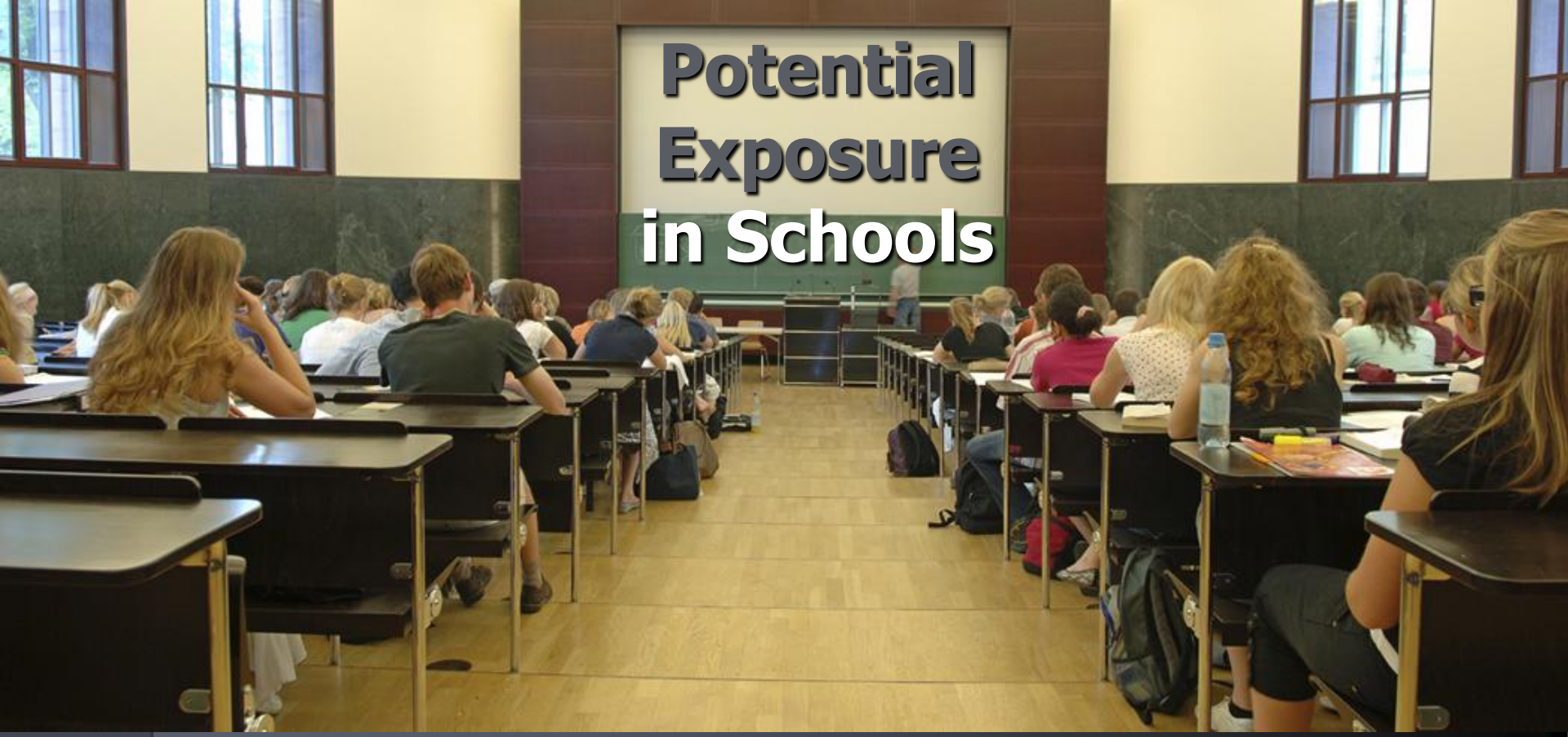
Pesticides and Asthma



According to the US EPA Office of Research and Development's Asthma Research Strategy, "pesticides are listed as one of four environmental pollutants that may influence the induction and exacerbation of asthma."

Pesticides and Health Concerns

- If applied irresponsibility, some pesticides have been linked to long term health problems, including:
  - Cancer,
  - Leukemia,
  - Birth defects,
  - Endocrine disruption,
  - Asthma,
  - Neurological disorders,
  - Immune system deficiencies.



Potential Exposure in Schools

- During any normal school day, children and school personnel can be exposed to pesticides.
- Pesticide exposure at school can occur whether applications are made before children enter the building or even after they leave, especially if the label directions were not followed.
- Chemicals may become airborne and settle on all surfaces.

Residue Accumulation

- Accumulations of pesticides can linger well beyond the initial application, remaining on unsprayed furniture and children's toys for weeks or months after an indoor application.
- Residues linger in carpet dust for up to one year.
- Cleaning does not necessarily mitigate residue, either.

Pesticide Use in Schools

- Not all pesticides are created equal.
- Some pesticide products are much less-toxic than others.
- Pesticides should **never** be applied as routine or "preventive treatments" in or around schools.

An ounce of prevention is worth a pound of cure

- Take precautions to prevent the possible harmful effects of exposure to children.
- The EPA recommends that schools use integrated pest management (IPM) to reduce pesticide risk and exposure to children.
- IPM is a safer, and is usually a less costly option for effective pest management in a school.

Integrated Pest Management

"Integrated Pest Management, is a long-standing, science-based, decision-making process that identifies and reduces risks from pests and pest management related strategies.

IPM serves as an umbrella to provide an effective, all encompassing, low-risk approach to protect resources and people from pests."

Integrated Pest Management

- As a first line of pest control, School IPM programs work to manage turf areas, and indoor spaces to prevent pests from becoming a threat.
- These control methods can be very effective, cost-efficient and present little to no risk to people or the environment.
- Integrated pest management provides an opportunity to create a safer learning environment.

Why we need Pest Management

All creatures require food, water and shelter to survive.

Pests find buildings where these needs are met and take up residence.

Block pests out and remove their sources of food, water and shelter and you will need fewer pesticides to control pests.

The Steps to Follow in IPM

1) Develop and implement a Pest Management Plan,
2) Conduct an inspection to identify pest issues,
3) Monitor for signs of pest activity,
4) Use non-chemical approaches like sanitation and maintenance to:
   - A.) keep pests out,
   - B.) remove food and water sources,
   - C.) take away their homes/ harborages.

5) Apply low-toxicity pesticides such as baits, traps or gels.
6) Keep a log book of sightings and activities.

Benefits of School IPM

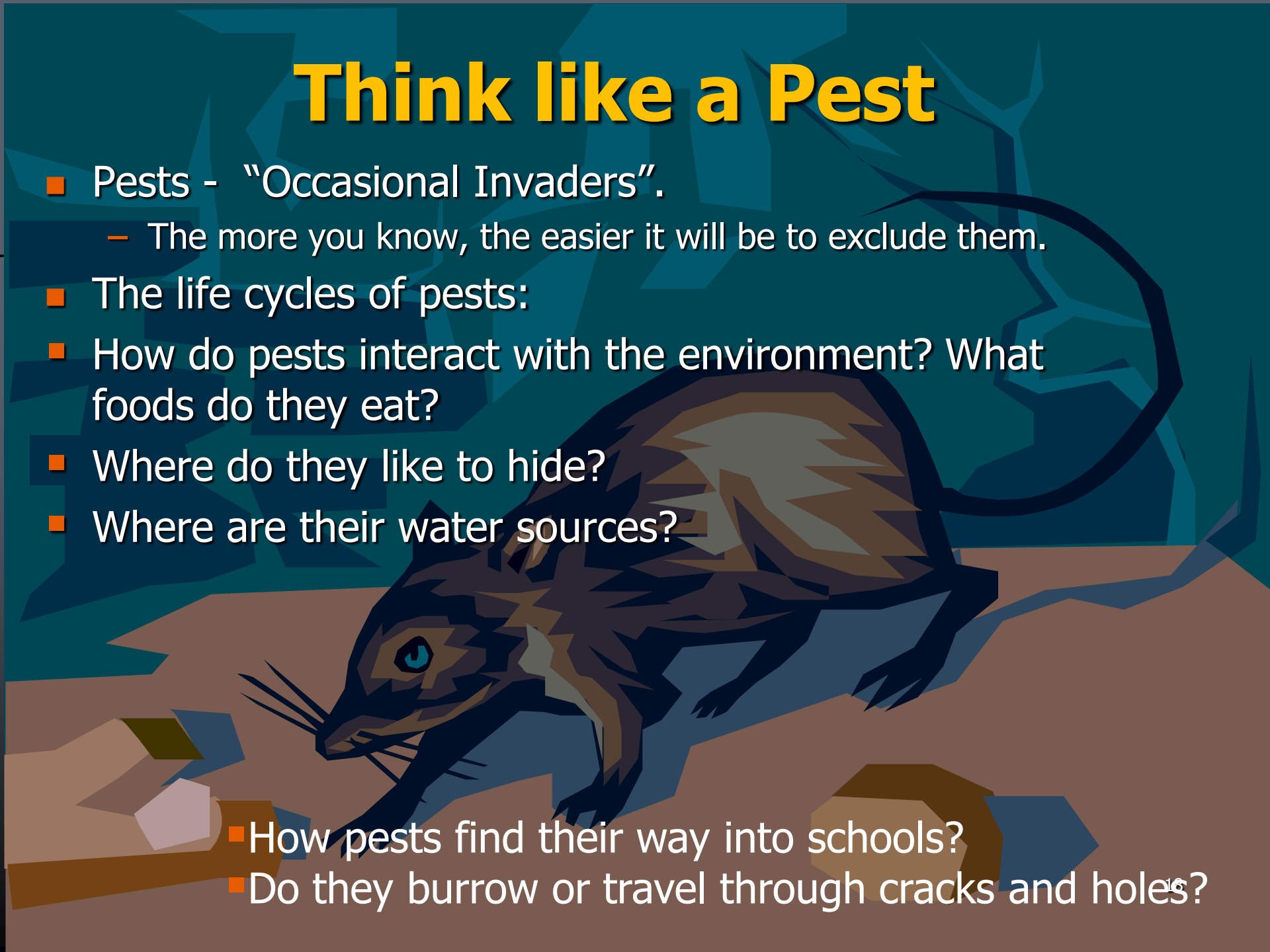
- More effective: Address the root cause of pest problems by removing what attracts pests and deny access.
- Healthier learning environment for our children.
- Better long-term control of pests.
- Reduced liability of school districts.
- Lower cost to taxpayers / school budget.
- Promotes cooperation between staff.

Fallacy: Pesticides are necessary because IPM is too expensive for schools.

- Once maintenance issues have been addressed (such as door sweeps or general pest proofing) and the school community is practicing real IPM, the pest management costs go down and may continue to decrease.

Think like a Pest

- Pests - "Occasional Invaders".
  - The more you know, the easier it will be to exclude them.
- The life cycles of pests:
- How do pests interact with the environment? What foods do they eat?
- Where do they like to hide?
- Where are their water sources?



- How pests find their way into schools?
- Do they burrow or travel through cracks and holes?

Do we have a pest problem?

- Many facilities do not have a pest problem, only occasional invaders.
- Evaluate. What pests have you seen in the past year?
- Where?
- When?
- How many?
- Where do they come from?

IPM Programs

- Not all insects, weeds, and other living organisms require control.
- Many organisms are innocuous, and some are even beneficial.

- The Goals of IPM:
- Identify the pest accurately , monitor pest populations, and establish action thresholds to make appropriate control decisions.

Pests that commonly sneak into schools:

- Ants
- Cockroaches
- Rats and Mice
- Flies
- Head lice
- Bed bugs
- Yellow jackets
- Termites
- Spiders
- Mold

What are your pest thresholds?

- At what point does a school administrator determine if there is a real pest problem?
- When is it time to call a pest control company?
  - 1 ant found?
  - 5 ants found?
  - 20 ants found?
- Was a source for entry found?
- Was the entry source blocked?
- Are ants still entering?

Integrated Pest Management (IPM)

- IPM includes less-toxic steps to monitor and control pests such as:
  - sticky traps
  - glue boards
  - baits in child resistant bait station.

Inspect for Evidence

Examples:

- Droppings
- Urine
- Chewed boxes
- Chewed wires
- Chewed wood

To determine the extent of a pest problem: Monitor

- Observe trends and changes in pest activity.
- Monitors and Traps are assessment tools to determine the degree of infestation.

Reading your Monitors

- Record information from the traps and glue boards. ID.
- How many?
- Life cycle stages.
- If you see nymphs in addition to adults – you have a breeding population nearby.

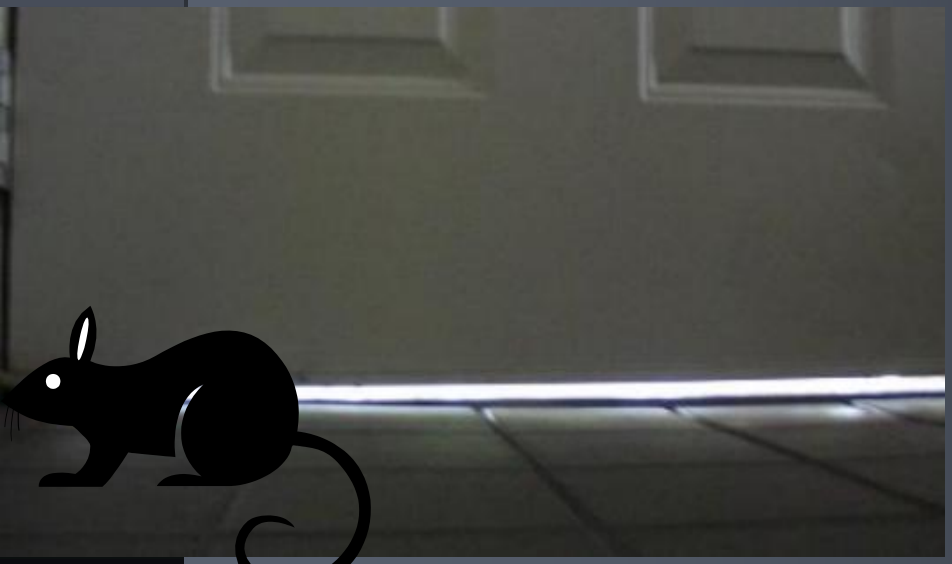
Traps & Baits

- Key ant, roach, and rodent management tools.
- Baits contain slow acting poisons mixed with a substance that attracts pests looking for food.
- Pests often carry the bait back to the nest.
- Use baits in bait stations.
- Place only where children do not have access to them.

Exclusion: Keep Pests Out

If pests can't get inside, then they won't be a problem.

Keep Pests Out
Install Door Sweeps



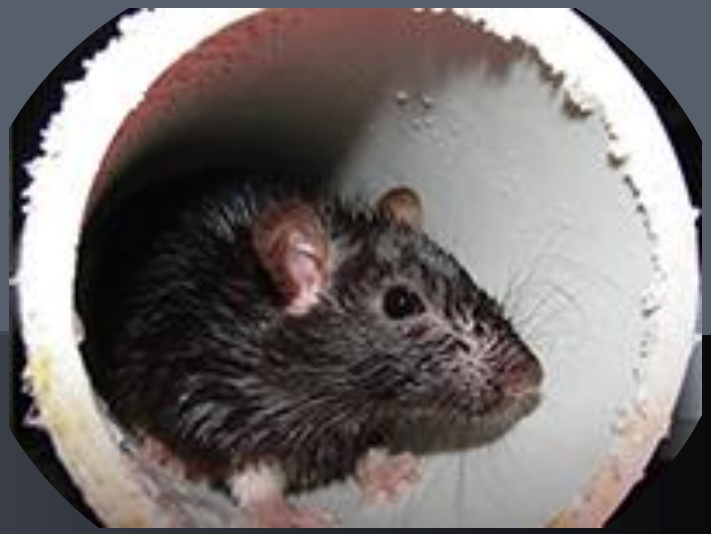
- Avoid propping doors open.
- Ensure that weather stripping and door sweeps are present and in good condition on exterior doors.
- Check all door moldings.

Keep Pests Out: Exclusion

Windows, screens and vents should be maintained in good condition.

- Building eaves, walls, gutters and roofs are sound.
- No evidence of water leaks or holes.
- If pests cannot get into the facility than you won't need to kill them.

Keep Pests Out



- Mice can fit through a hole smaller than a dime.
- Prevent pests from getting into buildings by properly blocking the entry points.

Be they large or small,
pests can crawl through any hole.

Pipe holes properly sealed

Keep Pests Out

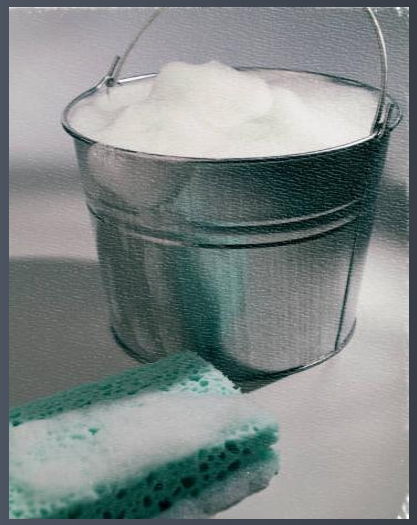
- Caulk, cement or fill cracks and holes including:
- Holes in or around foundations
- Gaps around pipes
- Ducts and vents
- Window frames

How to Keep Ants Out

- Follow the ant trail….
- Caulk cracks around the foundation including wire and pipe entrances.
- Keep plants and mulch away from foundations.
- Remove garbage from buildings each day.
- Change trash can liners when dirty.

Get rid of ants

- One or two wandering ants are scouts searching for new food or nesting sites. Kill them.
- Sponging soapy water removes the ants' scent trail.
- Find the source.



Eliminate entry and harborage

- Adult cockroaches can fit into cracks only 1.6 mm wide (about 1/16 of an inch).
- Any small gap or hole that leads to a void is a prime cockroach living area.
- Replace any cracked floor, wall tile or moldings.
- Cracks and crevices should be sealed with caulk.

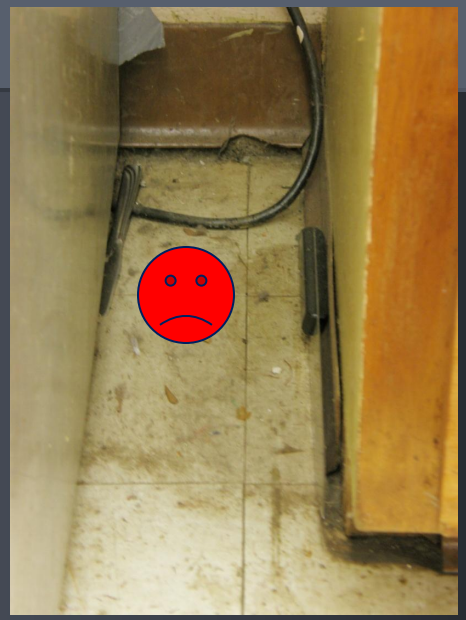
Pest Prevention: Exclusion

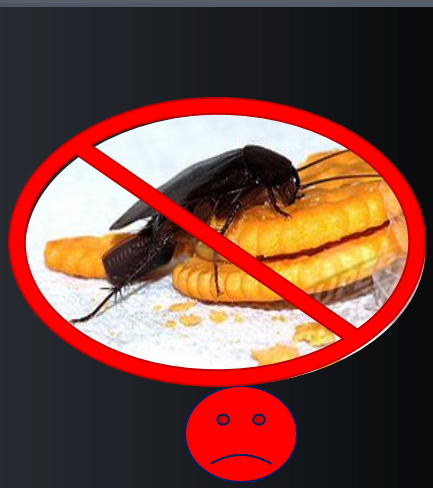
- Inspect deliveries (pests hitch-hike).
- Unpack delivered items from cardboard boxes
- Remove cardboard.
- Scan all grocery items for cockroach and other pest evidence before putting them away.

Pest Proofing

- Flush and cover drain traps.
- Place fiberglass window screening over vent pipes.
- Use metal flashing, hardware cloth or copper wool to seal floor drains, vents, holes, and gaps around pipes.

B. Starve them out:
Remove pests' food and water





- Good sanitation is good pest management!
- Clean thoroughly and regularly.
- All foods products should be stored in plastic snap-lid containers or kept in the refrigerator after opening.

Eliminate Water Sources

- Tighten loose pipes, patch plumbing leaks and replace used washers around water pipes.
- Dry sink at the end of the day.
- Cover or close drain.
- Insulate pipes to avoid condensation.

Pest Prevention: Sanitation

- Empty sink strainer frequently.
- Wash dishes immediately after use.
- Do not leave dirty dishes overnight.

Remove Pest Food: Waste Management

Employ good trash management practices:

- Indoor trash containers should be emptied frequently.
- Trash cans should have lids.
- Do not leave trash cans full overnight.
- Keep trash cans clean both inside and out.
- Tie Plastic bags tightly.

Take away their homes: Harborage/Shelter

- Caulk or seal cracks or holes in:
- interior walls,
- around pipes;
- behind sinks and
- along baseboards.

Take away their homes

- Clutter hides evidence of pest infestation. Removing clutter eliminates pest harborage and breeding areas.
- Organize storage rooms and clean periodically.
- Clutter, cardboard and holes in walls provide places for pests to hide, sleep and reproduce.

Take away their homes.

- Recycle corrugated cardboard.
- Avoid using cardboard for storage.
- It is a favorite living-space for cockroaches and other critters.

In schools, pest vulnerable areas include:

- Kitchen / food prep areas
- Eating areas / Cafeterias
- Faculty Rooms
- Custodial Areas
- Gymnasiums / Locker rooms
- Closet/storage areas
- Classrooms
- Coat / hat storage areas
- Student Lockers
- Bathrooms

Kitchen / Food Prep Areas

- All surfaces in food preparation and serving areas should be cleaned regularly and thoroughly. (after each use)
- Ensure all cracks, leaks and moldings are sealed or caulked.

More Moisture Sources

- A common source of moisture is condensation under refrigerators.
- This area should be frequently wiped dry or, if possible, placed a pan under the appliance to collect water.
- The collection pan should be emptied frequently.

Kitchens and Food Prep Areas

- Clean hard-to-reach areas.
- Clean floor drains and ventilation screens.
- Seal gaps around pipes and fixtures.

Remove pest food

- Kitchen appliances should be kept clean and free of food particles and grease.
- Additionally, the areas underneath and behind these appliances should be kept grease and crumb free.

Good sanitation is good pest management!

- Clean to the corner - clean hard to reach spaces.
- Sweep and mop daily.

Kitchen Storage Areas

- Keep food and beverages in tightly sealed containers.
- Bulk stored products should not be allowed direct contact with walls or floors, allowing access for inspection and reducing pest harborages.
- Store paper goods separately and away from food.

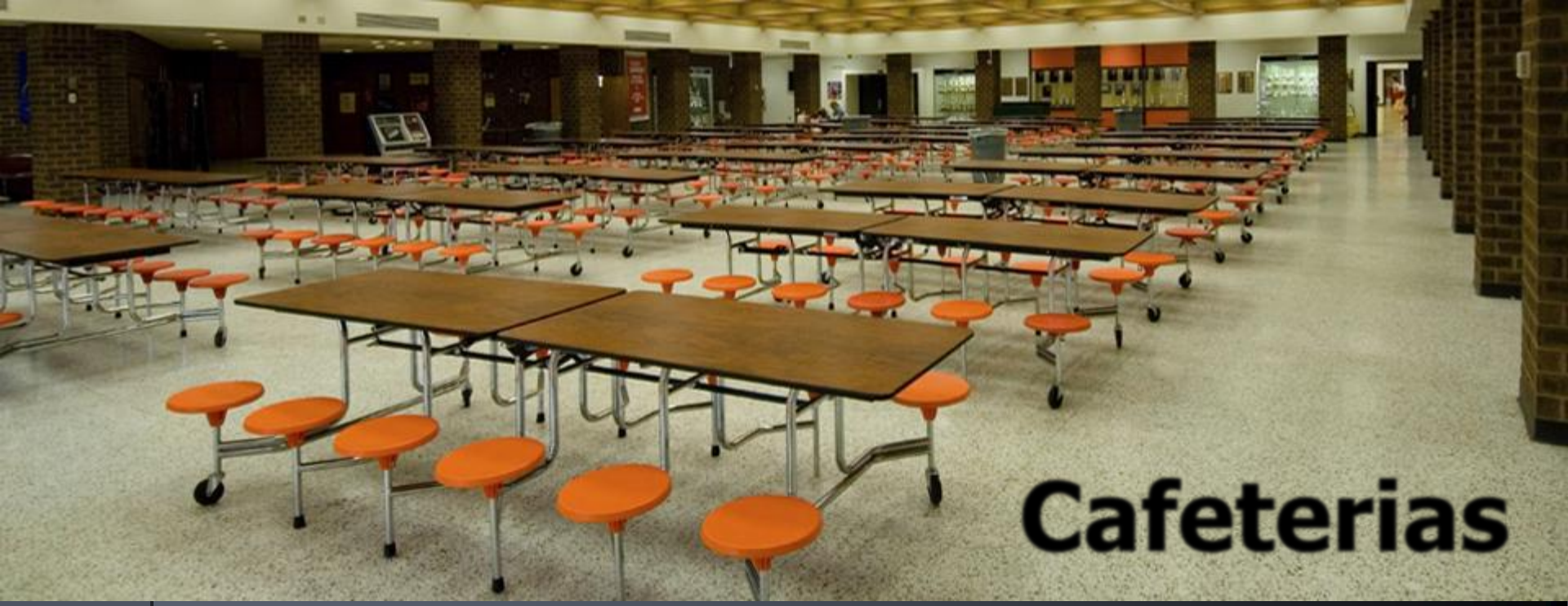
Kitchen Storeroom

- Use wire shelves
- Shelves should be 6-12” above the floor
- Avoid shelving with “kickplates” or hollow spaces
- Eliminate most cardboard
- Never place cardboard boxes on bottom shelves or floor.
- Discard damaged goods.

Kitchen storage

Keep all storage at least 6” above floor.
Mop down floor regularly.

Even in tight spaces, IPM can be practiced effectively.



- Pest problems can become severe in school cafeterias.
- Sanitation is essential. Close, careful inspection of the dining hall is very important.
- The tubing frames of cafeteria tables provide excellent harborage for cockroaches.

Vending Machines

- Mice and roaches often find their way in for a midnight snack.
- Dirty machines with spilled or broken product attract them.
- Ensure district has a periodic ‘cleaning’ clause in their vending contract.
- Monitor.

Cafeterias

- Serving line spills can create pest problems.
- Thoroughly clean and dry trays and dish return areas.
- Properly clean dishwashing racks.
- Small amounts of water can sustain a pest population.

Eating Areas

Starve pests:

- Keep all eating confined to designated areas.
- Food serving tables and floor must be thoroughly cleaned after each use.
- Pest monitors should be installed in any classrooms where food is served on a regular basis.

Classroom Areas

Sort paper and classroom materials in plastic see-through boxes, and store at least eight inches off of the floor to allow proper access for cleaning.

Avoid Food in Classrooms

- If meals must be in the classroom, ensure thorough cleanup and refuse disposal.
- **No** food should be stored in classrooms.
- Food manipulatives such as beans or pasta should be stored in pest-proof containers.

Clutter and pests

- Clutter control is essential in classrooms to reduce potential habitats for pests.
- Clutter enables pests to hide and reproduce undisturbed.
- Store materials in plastic storage boxes with lids.
- Store items several inches away from walls to enable easy inspected for pests.

Eliminate Clutter / Harborage

- Clutter removal is an essential part of IPM and pest elimination.

Pets in classrooms

- Keep all pet food stored in plastic containers with tight-sealing lids.
- Clean up any spilled foods promptly.
- Pet cages and aquariums must be kept clean.
- Check aquariums for water leaks.

Why does this classroom have mice and roaches?

Cubbies, Lockers and Coat Hooks

- Cubbies, lockers and child storage should be emptied and cleaned at least once per season.
- Leave sufficient space between coat hooks so that each child's belongings do not touch those of another child.
- No food should be stored in cubbies and discouraged in lockers.

Restrooms

- Clean rooms daily
- Removed trash daily
- Keep plumbing in good repair
- Keep sink areas clean and dry
- Fill all holes around pipes

Custodian's Closets and Storage

- Utilize appropriate shelving and storage practices
- Keep clean and clutter-free
- Remove all cardboard
- Do not store boxes or cardboard on the floor

Custodial Mop Room

To reduce pest harborage in custodial closets:

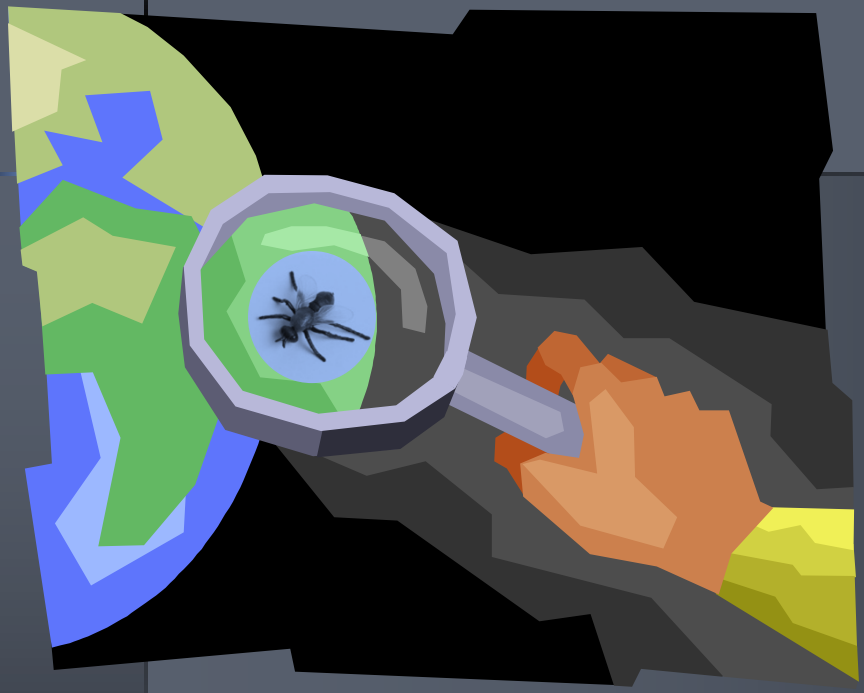
- Keep mop sinks and buckets empty and dry when not in use.
- Hang all mops, allow to dry.
- Repair plumbing leaks.
- Keep floor drains clean.
- Seal gaps around pipes.

Custodial Storage

School Integrated Pest Management:

- IPM is not just about pest control, but can also be a way to think and react to everyday actions.
- IPM is about all pests that find their way into schools.
- IPM is about maintaining the school building so it is safe for students and staff.
- IPM is about people working together.

Inspections and logs



Visual inspection and inspection logs are essential to:

- determine the extent of the pest problem.
- determine the condition of the facility in order to plan a site-specific treatment.
- determine preparation needs and steps.
- Track changes and / or trends.

Correct the Problem

1. As a first line of pest control, IPM programs work to manage the indoor space to prevent pests from becoming a threat.
2. Use sanitation, maintenance and barriers to eliminate pest food, water and habit.
3. Continue monitoring for pest infestation levels.

Integrated Pest Management (IPM)

Monitor with traps and boards before resorting to more toxic solutions.

- IPM is an effective way to reduce potential children's exposure to both chemical pesticides and allergen triggers.
- Remember, IPM includes less-toxic steps to control pests.

Waste Disposal Areas

- Garbage containers, should be placed away from building entrances.
- Dumpsters should have close-fitting lids and be kept closed.

Keep Dumpster Areas Clean

Empty indoor garbage promptly into dumpsters. Keep area around dumpsters clean and free of debris.

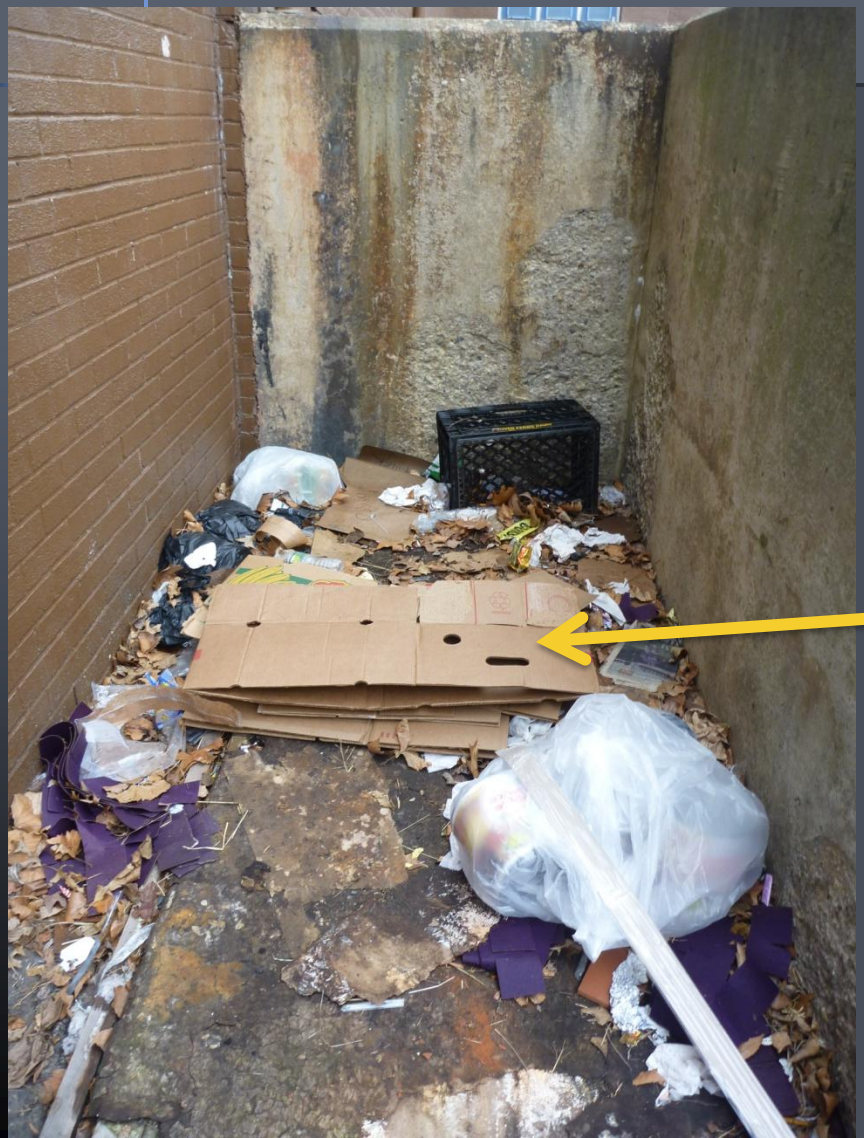
Garbage Disposal Areas – Indoors and Out

Manage trash and waste properly:

- do not overload trash bags,
- tie bags tightly,
- empty trash receptacles daily,
- keep garbage cans and dumpsters lids on securely,
- keep clean of food- wash out regularly.

Pest Prevention:
Keep your recycling area clean.

Recycling Areas



Rodent Management

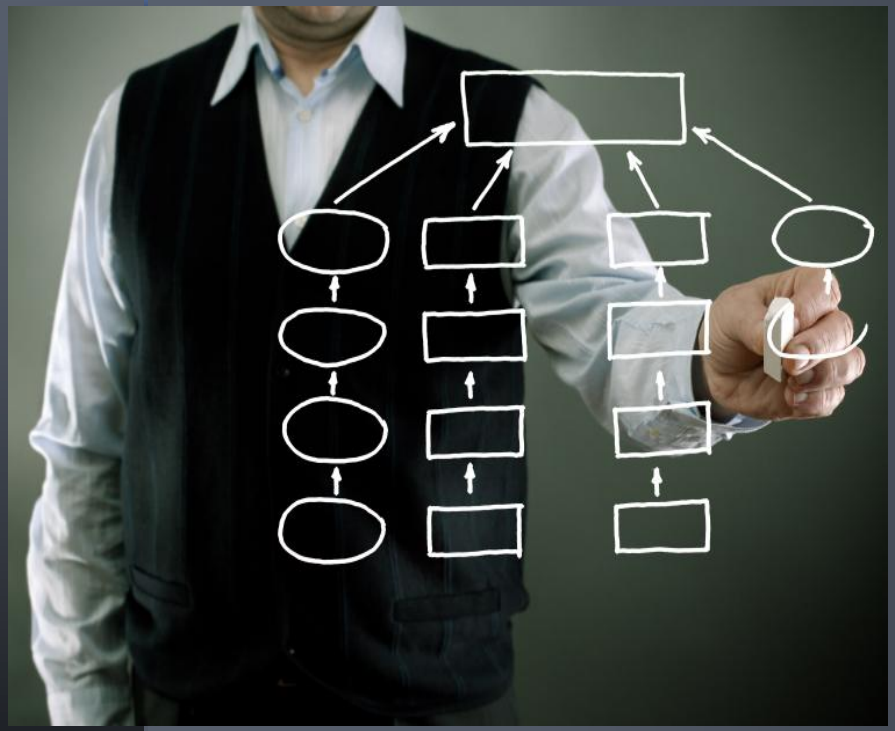
- Trapping is an important component of rodent control.
- Rats are trap-shy and will avoid traps.
- Put the traps out with bait, but do not set them for several days until the rats are used to them.
- Only use baits within a child resistant bait station.
- Never spread loose baits – **it is illegal.**

- Applying IPM principles prevents unacceptable levels of pest damage or annoyance, with the least possible hazard to people, property and the environment.

IPM Implementation

Developing an IPM Program

Essential Ingredients for a School IPM Program:

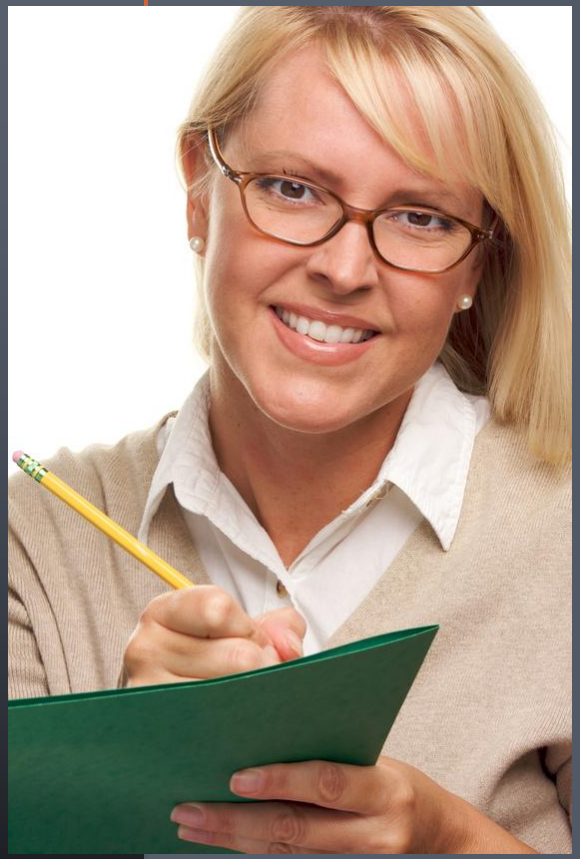


- IPM Policy and Plan
- IPM Coordinator
- Staff involvement
- Assessment of Pest Issues
- Inspection and Monitoring
- Pest Identification
- Managed Treatment
  - Determine pest threshold.
  - Use multiple control tactics.
- Education

Evaluate Pest Management Options

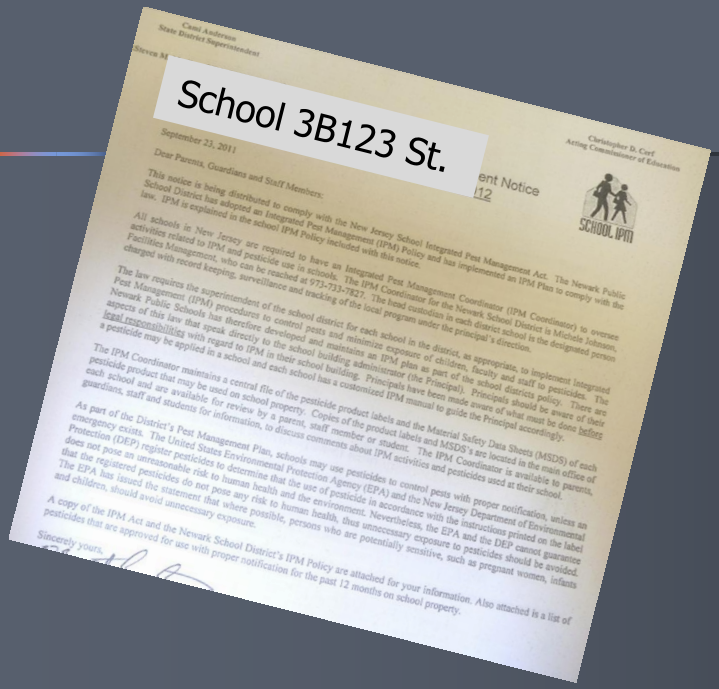
- Consider all pest management options, including:
- No action at all.
- Non-pesticidal pest management methods.
- Consider using low impact pesticides first.
- Use pesticides if other methods of pest control are not effective.

The Facility IPM Coordinator:



- Oversees day to day pest problems.
- Is responsible for maintaining the facility so pests cannot move in.
- Relies on facility employees to report needed repairs or pest problems.
- Maintains all pesticide application logs and records.
- Ensures notice of pesticide treatments to parents and staff.
- Is the main contact to the school pest management company.

District and School IPM Policy



- **We suggest that every school have an IPM Policy.**
- The School IPM policy should be sent home to all students / parents at the beginning of each school year.
- It should also be posted in in a visible common area, such as in the main office.

School IPM Plan

We suggest that every school should have an IPM Plan. The plan should:

- detail the school districts intent towards IPM and what guidelines they will follow.
- Ultimately be site-specific.
- have statements about monitoring, inspections, establishing thresholds, who can apply pesticides, how problems should be reported, and who should be educated about the program.
- be adopted by the School Board to set standards for the district and schools.

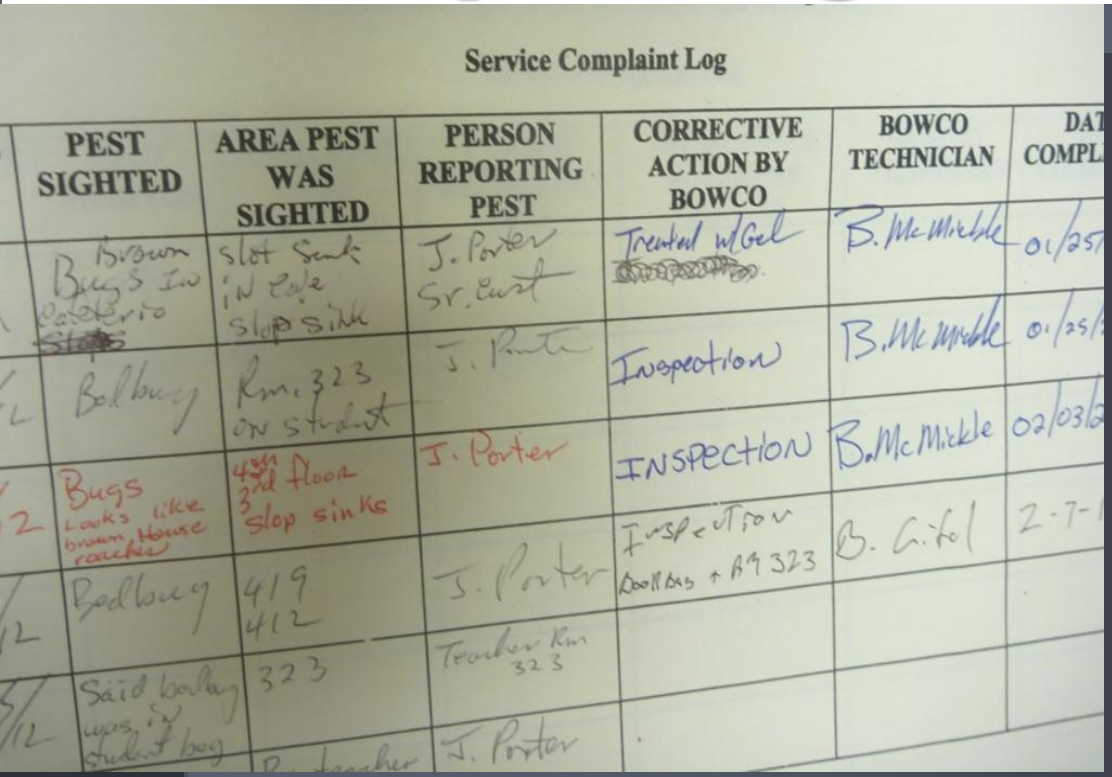
Staff Involvement:
See Something, Say Something.

- Remember School IPM is everyone's job.
- Everyone has a role to play with pest control issues:
  - Report broken doors, leaky pipes and faucets, cracks in walls.
  - Pick up clutter in your room.
  - Don't leave food, crumbs, candy and other items around.
  - Store food items in locking plastic containers.
  - Report food and drink spillages when they occur.

Inspect and Monitor

- Conduct daily inspections
- Check monitors
- Make sure staff knows to inform the IPM coordinator of any and all sightings of:
  - Corpses, shed skins, droppings, actual live insects, or animals, damage, debris, or urine stains.

Reporting Pests



Service Complaint Log

PEST SIGHTED	AREA PEST WAS SIGHTED	PERSON REPORTING PEST	CORRECTIVE ACTION BY BOWCO	BOWCO TECHNICIAN	DAT COMPL
Brown Bugs In Cafeteria	slot Sink IN Cafe Slop sink	J. Porter Sr. Asst	Treated w/Gel	B. McMickle	01/25
Bedbug	Rm. 323 on student	J. Porter	Inspection	B. McMickle	01/25
Bugs Looks like brown House roaches	4th 3rd floor 3 Slop sinks	J. Porter	INSPECTION	B. McMickle	02/03
Bedbug	419 412	J. Porter	Inspection Doors + Rm 323	B. Gifol	2-7-
Said bedbug was in student bag	323	Teacher Rm 323			
		J. Porter			

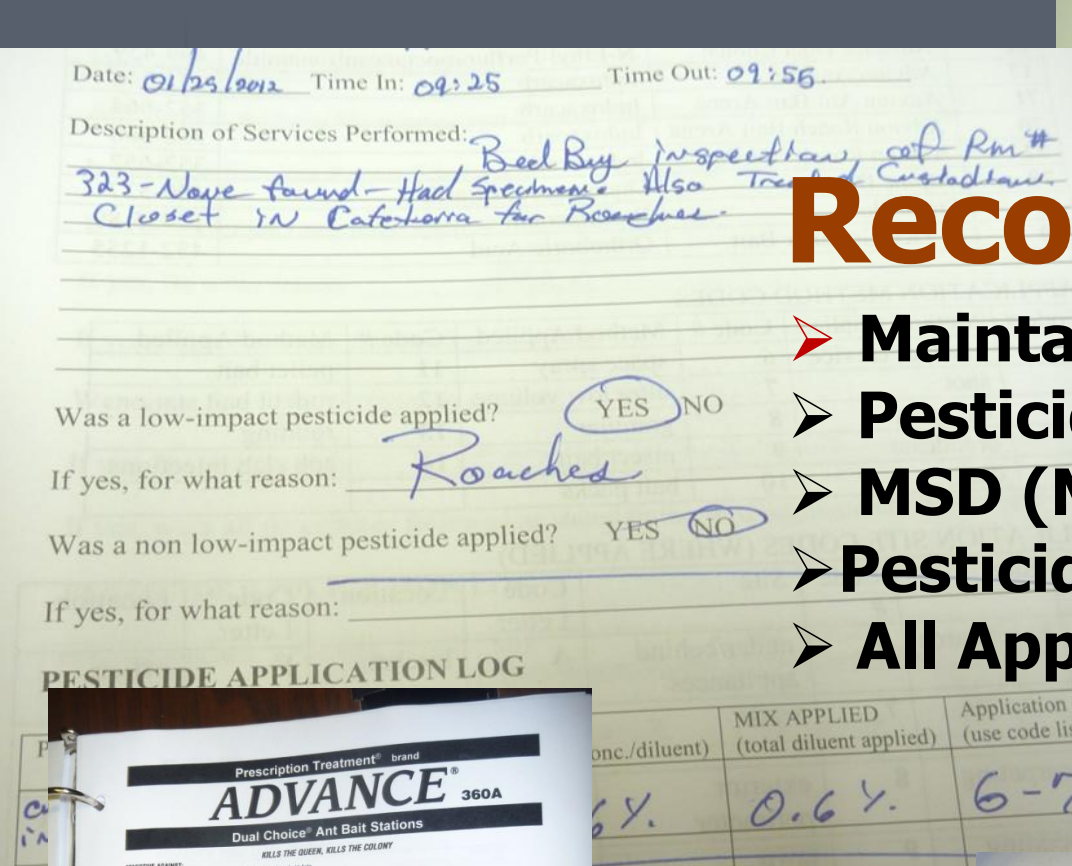
Sight & Log

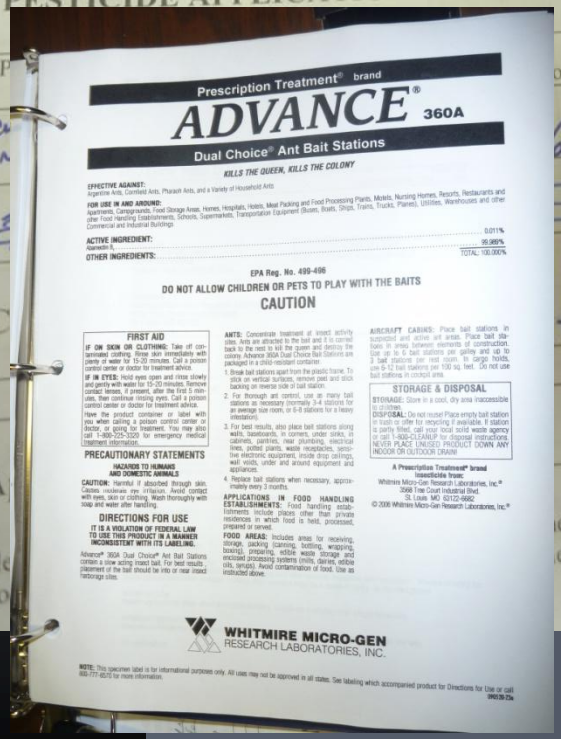
- Contact the IPM Coordinator.
- We suggest creating a sequential system to report pest complaints and building problems.

Pest sighting and service logs should be kept by both the school food service and IPM coordinator.
Make accessible to inspectors, staff, and others.

Record Keeping

- Maintain Facility plan
- Pesticide application log
- MSD (Mfg. Safety Data) sheets
- Pesticide Company Code Sheet
- All Application Receipts





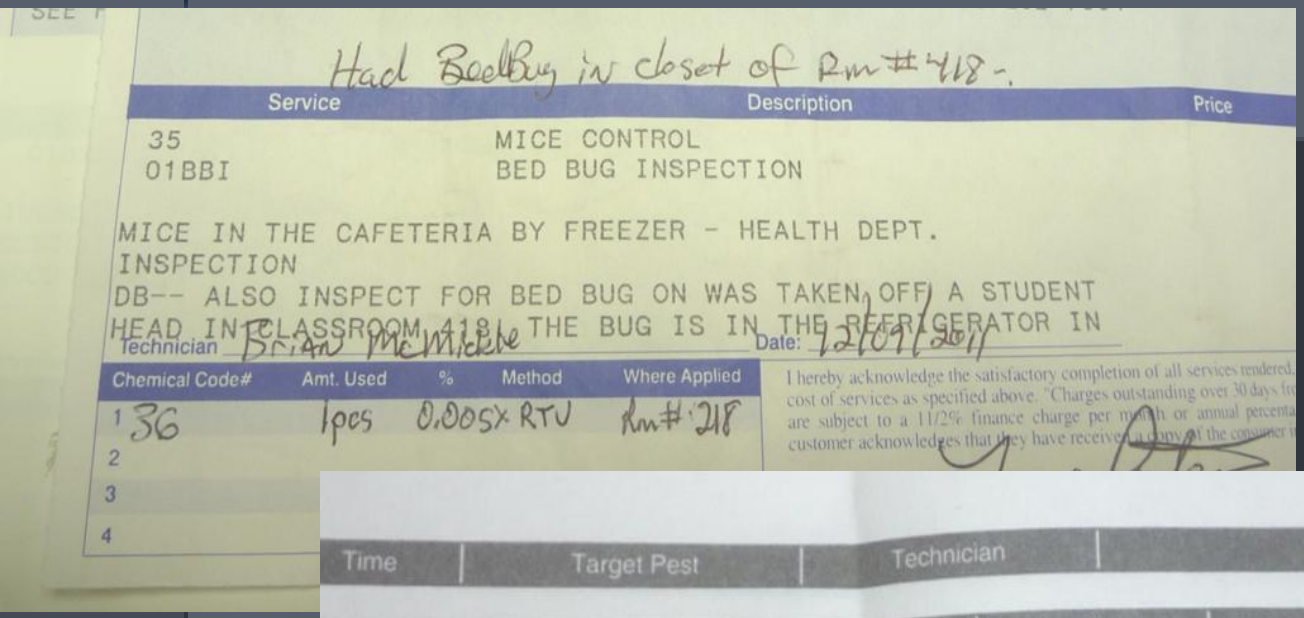
Ticket No.	Name, Active Ingredient, and Concentration(s)	EPA Reg. No.	Signal Word	Precautions
122	565 Plus XLO (0.5% Pyrethrins plus Synergists)	499-200	Caution	A,C,D,E,L,M
124	Advance Dual Choice 360A (0.011% Abamectin B1)	499-496	Caution	C,D,E,L,M
125	Advance Granular Ant Bait (0.011 Abamectin B1)	499-370	Caution	A,C,D,E,L,M,N
20	Boric acid - Borid 99% [ ] Orthoboric ACID	9444-129	Caution	A,B,D,L,M
20	Mop Up 98% [ ] (DOT)	9444-132	Caution	A,D,L,M
30A,C,D	Contrac Blox, Meal, and Rodenticide (0.005% Bromadiolone)	12455- 79, 86, 69	Caution	A,L,M
126	Cy-Kick Crack and Crevice Flusher (0.1% Cyfluthrin)	499-470	Caution	C,D,E,L,M
37	Deltadust- (0.05% Deltamethrin)	432-772	Caution	C,D,E,L,M
38	DeltaGard Granules (0.1% Deltamethrin)	432-836	Caution	A,D,L,M
42	Ditrac Tracking Powder (0.2% Diphacinone)	12455-56	Warning	D,E,G,J,L,M
55A,B	Final Blox, Rodenticide (0.005% Brodifacoum)	12455- 89, 90	Caution	A,L,M
58	Gentrol IGR Concentrate (9% Hydroprene)	2724-351	Caution	A,C,D,E,L,M
101	Golden Malrin (1.1% Methoxyl)	2724-274	Caution	A,C,D,E,L,M
64	Liqua-Tox II (0.05% Diphacinone)	12455-61	Caution	D,E,L,M
65C	Maxforce Ant Killer Bait Stations (1% Hydramethylnon)	432-1252	Caution	C,D,E,L,M
65A	Maxforce Carpenter Ant Bait Gel, Ant Killer Bait Gel (0.001% Fipronil)	432-1264	Caution	A,E,L,M
65B	Maxforce FC Ant Bait Stations (0.01% Fipronil)	432-1256	Caution	L,M
67A	Maxforce Fine Granular Insect Bait (1% Hydramethylnon)	432-1262	Caution	A,D,E,L,M
68A	Maxforce Roach Killer Bait Gel (2.15% Hydramethylnon)	432-1254	Caution	A,D,E,L,M
68B	Maxforce FC Select Roach Killer Bait Gel (0.01% Fipronil)	432-1259	Caution	C,D,E,L,M
68C	Maxforce Roach Killer Small Bait Stations (2% Hydramethylnon)	432-1251	Caution	A,L,M
70	Niban - Granules [ ] Fine Granules [ ] (5% Orthoboric Acid)	64405-2	Caution	A,C,D,E,L,M
83	Phantom Termiticide Insecticide 0.125% [ ] 0.25% [ ] (Chlorfenapyr)	241-392	Caution	A,B,C,D,E,F,L,M
104	Pharorid Ant Growth Regulator (1.5 ml/ounce of bait) (Methoprene)	2724-420	Caution	D,E,L,M
112	Precor IGR Concentrate (0.009% Methoprene)	2724-352	Caution	C,D,E,L,M
110,111	Sentricon Recruit IV, Recruit IV AG (0.5% Novaflumuron)	62719- 456, 454	Caution	L,M
76	Suspend SC 0.01% [ ], 0.03% [ ], 0.06% [ ] (Deltamethrin)	432-763	Caution	B,F,L,M
103	Talstar EZ (0.02% Bifenthrin)	279-3188	Caution	C,D,E,L,M
102	Talstar One (Bifenthrin) .06% [ ], 0.12% [ ]	279-3206	Caution	A,B,C,D,E,F,L,M
117	Tempo 1% Dust (1% Cyfluthrin)	432-1373	Caution	A,B,C,D,E,L,M,N
5	Termidor SC, (Fipronil) 0.06% [ ], 0.125% [ ]	7969-210	Caution	A,B,C,D,E,F,L,M
5	Termidor 80 WG (Fipronil)	7969-209	Warning	D,E,F,G,H,J,L,M
8	Timbor - Disodium Octoborate Tetrahydrate 10% [ ], 15% [ ]	64405-8	Caution	A,B,D,E,L,M
27	Ultracide (0.05% Pyrethrin, 0.04% Permethrin, 0.1% Pyriopoxyfen)	499-404	Caution	A,B,C,D,E,F,L,M
23	Wasp Freeze (0.129% d-trans Allethrin/0.120% Phenothrin)	499-632	Caution	A,B,C,D,E,F,L,M
THER				
THER				

Precaution Statements:

A. Harmful if Swallowed
B. Harmful if Inhaled
C. Harmful if Absorbed Through Skin
D. Avoid Eye Contact
E. Avoid Skin Contact
F. Avoid Breathing Vapors or Mist
G. Harmful or Fatal if Swallowed
H. Harmful or Fatal if Inhaled
J. Harmful or Fatal if Absorbed Through Skin
K. Don't Tamper With Bait Placements
L. Avoid Clothing Contact
M. Wash Hands Thoroughly with Soap and Water after Handling
N. Avoid Breathing Dust

Caution: Keep all products out of reach of children. Do not permit humans or animals to contact treated areas until dry. Keep away from humans, domestic animals and pets.

Record Keeping


Had BedBug in closet of Rm #418.

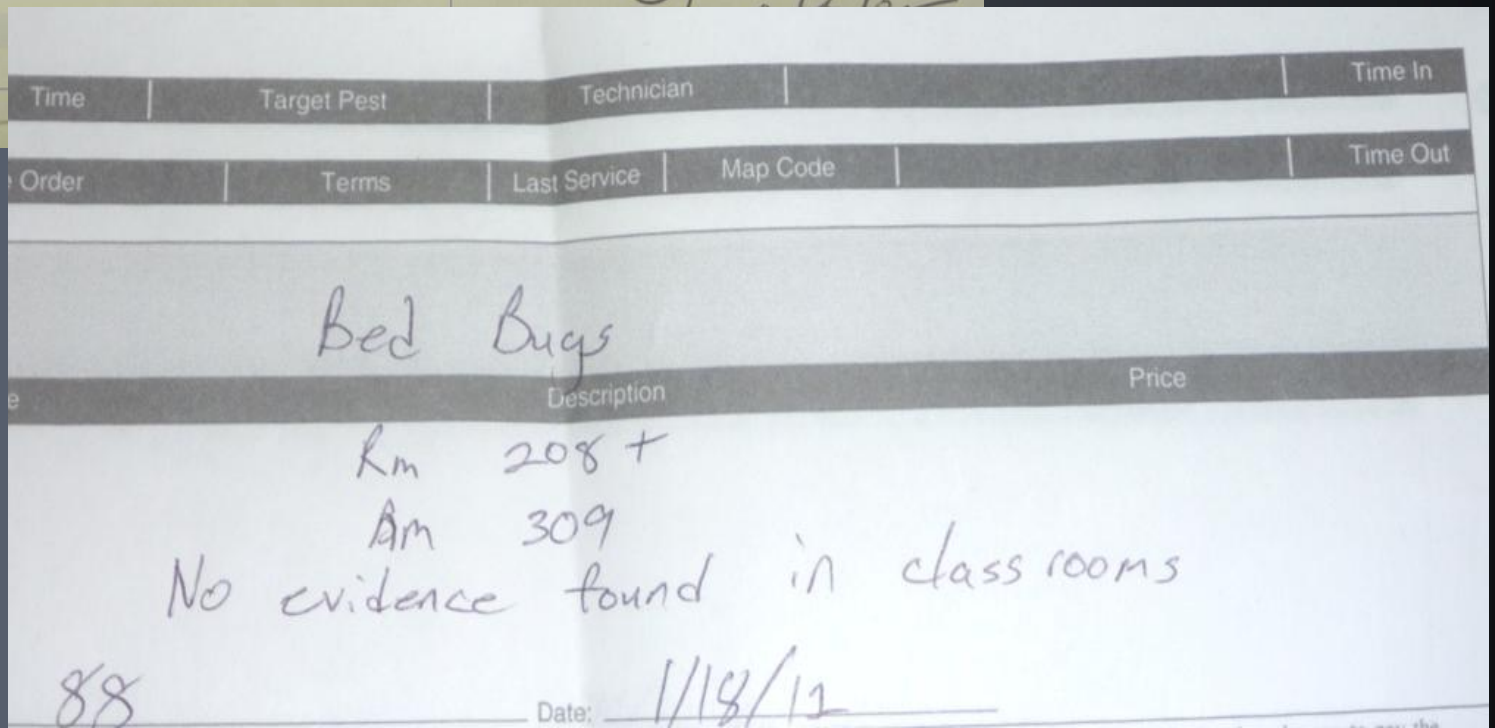
Service	Description	Price
35	MICE CONTROL	
01BBI	BED BUG INSPECTION	

MICE IN THE CAFETERIA BY FREEZER - HEALTH DEPT. INSPECTION
DB-- ALSO INSPECT FOR BED BUG ON WAS TAKEN OFF A STUDENT HEAD IN CLASSROOM 418. THE BUG IS IN THE REFRIGERATOR IN

Technician Brian McMickle Date: 12/07/2011

Chemical Code#	Amt. Used	%	Method	Where Applied
1 36	1pcs	0.005% RTU		Rm#218
2				
3				
4				

I hereby acknowledge the satisfactory completion of all services rendered. cost of services as specified above. "Charges outstanding over 30 days fo are subject to a 11/2% finance charge per month or annual percenta customer acknowledges that they have received a copy of the consumer


Time | Target Pest | Technician | Time In

Order | Terms | Last Service | Map Code | Time Out

Bed Bugs

Description | Price

Rm 208 +
Rm 309
No evidence found in classrooms

88 Date: 1/18/12

Keep all pesticide application records for 2 years or longer, if state regulations require.

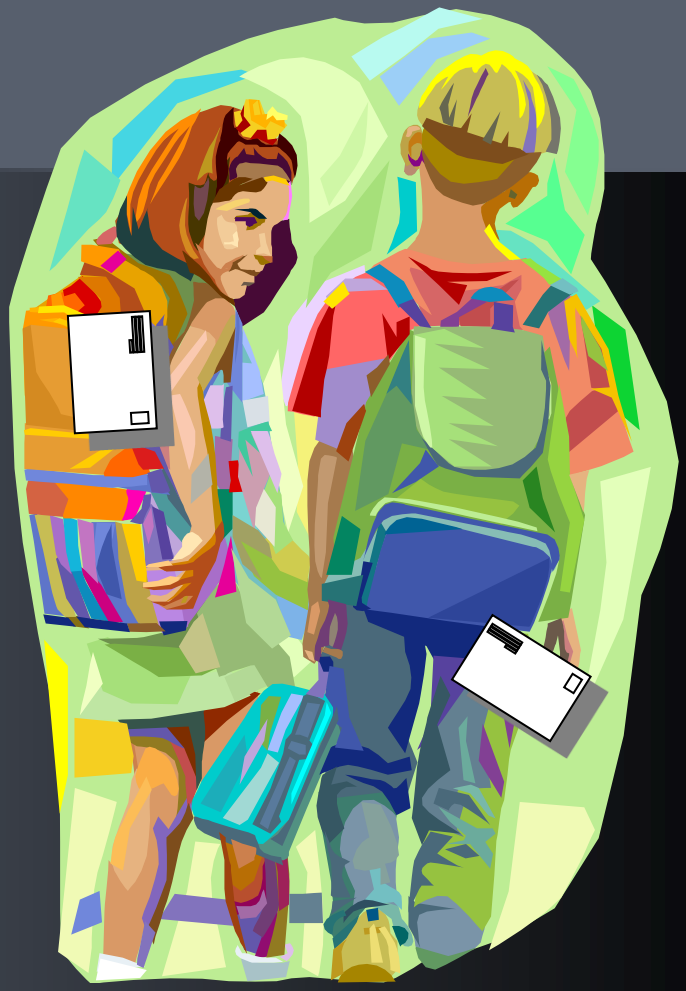
Posting

- Use signage to let people know that an area has been treated.
- Keep people from entering an area that has been treated with pesticides until it is safe to do so.
- Pesticide labels include information about recommended "reentry periods," after an application when normal human use of an area can resume. A Restricted Entry Interval (REI) must be posted and adhered to, if applicable.
- Read the label to determine the reentry time and environmental conditions.

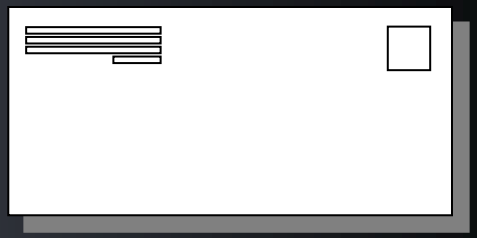
Pesticide Application Notification

The EPA suggests Pesticide Application Notification

- Notify parents or guardians and staff prior to application of any non-low impact pesticide treatments at the center.

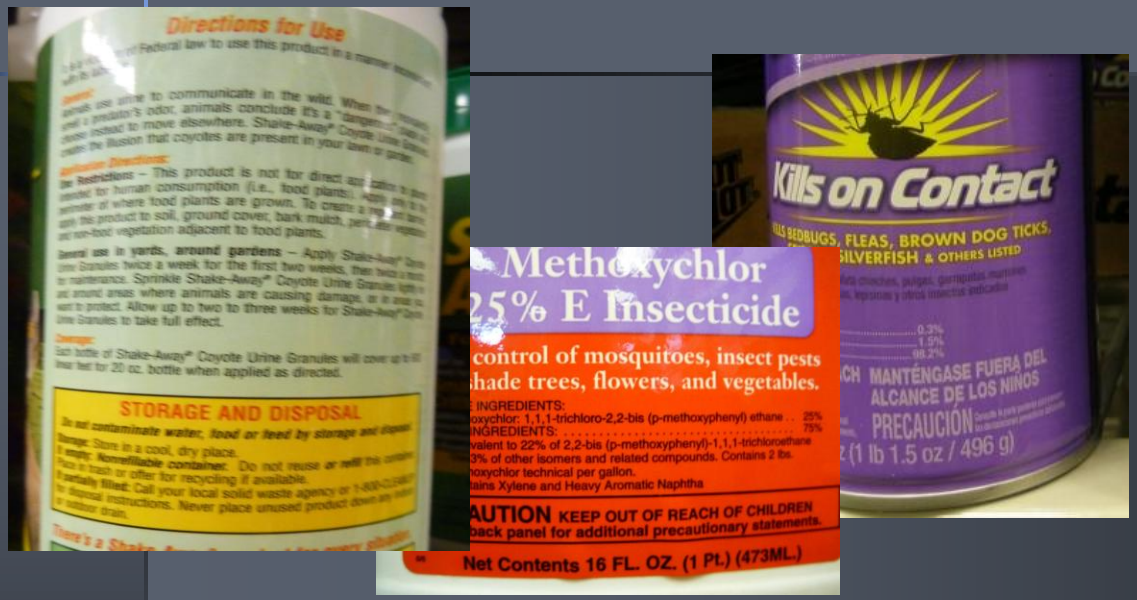


Fallacy: Schools should not be burdened with providing the entire school community prior notification of pesticide applications.



Even if not required, we still recommend timely notification of pesticide applications to all parents , guardians and staff.

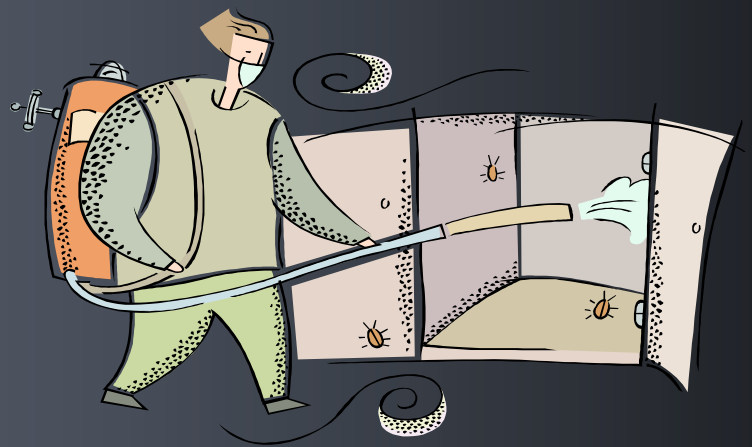
Fallacy: Doubling or tripling the dose is better.



- Fact: Only 1 out of 4 educated Americans actually reads the label on a pesticide product.
- Pesticide labels are very carefully written and reviewed – so read them. (IPM coordinators)
- Ensure that all directions are followed to the letter.

How often should a pest control company apply pesticides?

- Only when needed?
- Should they apply on a regular basis? Weekly? Monthly? Why?
- Should they applying to prevent pest problems?
- How do you determine the frequency of visits / applications?



How to Hire a Pest Management Professional

- Call several companies.
- Insist on references. Check the references.
- Do they offer Integrated Pest Management solutions to your problems?
- Do they perform IPM inspections?
- Are they IPM certified?
- Are they licensed and insured?

What is School IPM?

a) Controlling pests with pesticides first.
b) Controlling pests with only pesticides.
c) Controlling pests with no pesticides.
d) Using a combination of non-chemical strategies such as exclusion, maintenance and sanitation, followed by low-impact pesticides, if needed.

Benefits of School IPM

- Healthier learning environment for our children.
- Better long-term control of pests.
- Reduced liability of school districts.
- Lower cost to taxpayers / school budget.
- Promotes cooperation between staff.
- Reduced pesticide use.

Questions?

EPA Region 2 Pesticides Program
For more information on IPM and pest reduction go to:
http://www.epa.gov/pesticides/controlling/resources.htm or
anderson.marcia@epa.gov